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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,127	01/14/2004	Gerald M. Benson	51952US018	3826
32692	7590	05/02/2006	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			PHAN, JAMES	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/757,127

Applicant(s)

BENSON, GERALD M.

Examiner

James Phan

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/2/06 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 and 4-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 defines an article comprising an array of nonrutable cube corner elements, Claim 4 defines a plurality of laminae defined in the working surfaces thereof a nonrutable array of cube corner elements, and claim 8 defines an article comprising an array of microcubes in which every three by three subarray of microcubes is nonrutable. The feature recited in each of claims 1, 4 and 8 is a new matter because the original disclosure does not expressly, implicitly, or

inherently disclose any support for "an array of nonrutable cube corner elements", "a nonrutable array of cube corner elements" and "three by three subarray of microcubes is nonrutable". Applicant's states in the response filed 2/2/06 that the reorientation of laminae in Figs. 6-8 would form a nonrutable array of cube corner elements shown in Fig. 9. However, because Fig. 9 is a top view of an array of cube corner elements, a person skilled in the art cannot determine whether the array of cube corner elements is a nonrutable array; and thus, one of ordinary skill would not recognize in the applicant's disclosure a description of the invention defined by the claims.

Also, claims 5 and 7, lines 1-3, recite "for every plane in space there are two adjacent micro microcubes for which at the place of adjacency none of the face edges is parallel to that plane" is a new matter for the reasons discussed above because the recitation in claims 5 and 7 is an alternative way of describing the nonrutable array of microcubes. Since at least claims 5-9 are copied from patent claims 1-5 of the U.S. Pat. No. 6,015,214 and since the remaining claims contain features copied from the claims of the patent, interpretation of at least claims 5 and 7 of the present application have been based on the disclosure of the application of the U.S. patent including originally filed claims and the interpretations of the invention during the prosecution of the '214 patent. Applicant of the present application appears to have knowledge of the prosecution history of the '214 patent; and thus, copies of the originally file claim s 1-2 and the interpretation of "non-rutable array of microcubes" or "for every plane in space there are two adjacent micro microcubes for which at the place of adjacency none of the

face edges is parallel to that plane" during the prosecution of the '214 patent are not provided.

Furthermore, the remaining claims are directly or indirectly dependent on the rejected claims; thus, they are rejected for the same reasons.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The rejection of claims 1-22 under 35 U.S.C. 102(e) made in the office action mailed 8/23/05 is repeated. Applicant has not traversed the rejection; thus, no further discussion is necessary.

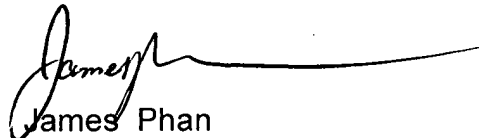
Conclusion

Applicant has requested a personal interview to discuss the "every plane in space" phrase recited in claims 5 and 7. This request has been considered and will be granted in the future. The examiner does not believe that there would be any confusing in interpreting claims including the "every plane in space" phrase because "An article comprising a non-rulable array of microcubes" (original claim 2 of the '214 patent) "is an alternative way of describing the same invention", i.e. the invention defined by claim 5 of the present application. If the applicant can show that he has possession of the "non-rulable array of microcubes", he would also have the possession of the invention defined by claims 5 and 7.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Phan whose telephone number is (571) 272-2317. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


James Phan
Primary Examiner
Art Unit 2872

JP
April 27, 2006